

ABSTRACT

A method of forming a memory device having a self-aligned contact is disclosed. The method includes providing a substrate having a floating gate dielectric layer formed thereon, forming a floating poly gate layer on the floating gate dielectric layer, forming a silicon nitride layer on the floating poly gate layer, and forming a photoresist layer on the silicon nitride layer. The method further includes etching the silicon nitride layer and the floating poly gate layer using the photoresist layer as an etch mask, forming an oxide layer over the exposed areas, removing the photoresist layer and the silicon nitride layer to expose the floating poly gate layer, forming poly spaces in the floating poly gate layer, and depositing a silicon nitride layer over the poly spaces of the floating poly gate layer to form a self-aligned contact.